SEQUENCE LISTING

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<110> Fox, Michael
     Sullivan, John K.
     Holst, Paige
      Yoshinaga, Steven Kiyoshi
<120> B7-Like Polypeptides and Uses Thereof
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<151> 2000-09-20
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                                     Met Ile Phe Leu Leu Met
ttg agc ctg gaa ttg cag ctt cac cag ata gca gct tta ttc aca gtg
                                                                   101
Leu Ser Leu Glu Leu Gln Leu His Gln Ile Ala Ala Leu Phe Thr Val
                                                  20
         10
                              15
aca gtc cct aag gaa ctg tac ata ata gag cat ggc agc aat gtg acc
                                                                   149
Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly Ser Asn Val Thr
     25
ctg gaa tgc aac ttt gac act gga agt cat gtg aac ctt gga gca ata
Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn Leu Gly Ala Ile
 40
                     45
                                          50
                                                                   245
aca gcc agt ttg caa aag gtg gaa aat gat aca tcc cca cac cgt gaa
```

T.

1,11

Fig.

Hand Hand

101

#

121 121

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1

Thr	Ala	Ser	Leu	Gln 60	Lys	Val	Glu	Asn	Asp 65	Thr	Ser	Pro	His	Arg 70	Glu	
aga Arg	gcc Ala	act Thr	ttg Leu 75	ctg Leu	gag Glu	gag Glu	cag Gln	ctg Leu 80	ccc Pro	cta Leu	ggg Gly	aag Lys	gcc Ala 85	tcg Ser	ttc Phe	293
cac His	ata Ile	cct Pro 90	caa Gln	gtc Val	caa Gln	gtg Val	agg Arg 95	gac Asp	gaa Glu	gga Gly	cag Gln	tac Tyr 100	caa Gln	tgc Cys	ata Ile	341
atc Ile	atc Ile 105	tat Tyr	ggg Gly	gtc Val	gcc Ala	tgg Trp 110	gac Asp	tac Tyr	aag Lys	tac Tyr	ctg Leu 115	act Thr	ctg Leu	aaa Lys	gtc Val	389
aaa Lys 120	gct Ala	tcc Ser	tac Tyr	agg Arg	aaa Lys 125	ata Ile	aac Asn	act Thr	cac His	atc Ile 130	cta Leu	aag Lys	gtt Val	cca Pro	gaa Glu 135	437
aca Thr	gat Asp	gag Glu	gta Val	gag Glu 140	ctc Leu	acc Thr	tgc Cys	cag Gln	gct Ala 145	aca Thr	ggt Gly	tat Tyr	cct Pro	ctg Leu 150	gca Ala	485
gaa Glu	gta Val	tcc Ser	tgg Trp 155	cca Pro	aac Asn	gtc Val	agc Ser	gtt Val 160	cct Pro	gcc Ala	aac Asn	acc Thr	agc Ser 165	cac His	tcc Ser	533
agg Arg	acc Thr	cct Pro 170	gaa Glu	ggc Gly	ctc Leu	tac Tyr	cag Gln 175	gtc Val	acc Thr	agt Ser	gtt Val	ctg Leu 180	cgc Arg	cta Leu	aag Lys	581
cca Pro	ccc Pro 185	cct Pro	ggc Gly	aga Arg	aac Asn	ttc Phe 190	agc Ser	tgt Cys	gtg Val	ttc Phe	tgg Trp 195	aat Asn	act Thr	cac His	gtg Val	629
agg Arg 200	gaa Glu	ctt Leu	act Thr	ttg Leu	gcc Ala 205	agc Ser	att Ile	gac Asp	ctt Leu	caa Gln 210	Ser	cag Gln	atg Met	gaa Glu	ccc Pro 215	677
agg Arg	acc Thr	cat His	cca Pro	act Thr 220	tgg Trp	ctg Leu	ctt Leu	cac His	att Ile 225	Phe	atc Ile	ccc Pro	tcc Ser	tgc Cys 230	atc Ile	725
				Phe					Ile					caa Gln		773
													Pro	gtc Val		821
		Lys					Ser				. acc	tgtg	gtc	ttgg	gagcca	874

gggtgacctg atatgacatc taaagaagct tctggactct gaacaagaat tcggtggcct 934

geagagettg ceatttgeac titteaaatg cettiggatg acceageact titaatetgaa 994
acctgeaaca agactageca acacetggee atgaaacttg eeeetteact gatetggact 1054
cacetetgga geetatgget titaageaage actactgeac tittacagaat taceecactg 1114
gateetggae eeacagaatt eetteaggat eettettget geeagactga aageaaaagg 1174
aattattee eeteaagtt tetaagtgat tieea 1209

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<211> 273

<212> PRT

<213> Homo sapiens

<400> 2

Met Ile Phe Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln 1 5 10 15

Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile 20 25 30

Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser 35 40 45

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn 50 55 60

Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu 65 70 75 80

Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp 85 90 95

Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr 100 105 110

Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr 115 120 125

His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln 130 135 140

Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val 145 150 155 160

Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val 165 170 175

Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys 180 185 190

Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp 195 200 205

Leu Gln Ser Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His

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210 215 220

Ile Phe Ile Pro Ser Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val 225 230 235 240

Ile Ala Leu Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp 245 250 255

Thr Thr Lys Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala 260 265 270

Ile

<210> 3

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> TRANSMEM

<222> (202)..(222)

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Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
1 5 10 15

Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn 20 25 30

Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn Asp Thr Ser 35 40 45

Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu Pro Leu Gly 50 55 60

Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp Glu Gly Gln 65 70 75 80

Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr Lys Tyr Leu 85 90 95

Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr His Ile Leu
100 105 110

Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln Ala Thr Gly
115 120 125

Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val Pro Ala Asn 130 135 140

Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val Thr Ser Val 145 150 155 160

Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys Val Phe Trp
165 170 175

Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser 180 185 190

Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His Ile Phe Ile 195 200 205

Pro Ser Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val Ile Ala Leu 210 215 220

Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp Thr Thr Lys 225 230 235 240

Arg Pro Val Thr Thr Lys Arg Glu Val Asn Ser Ala Ile 245 250

<210> 4

<211> 224

<212> PRT

<213> Homo sapiens

<400> 4

Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
1 5 10 15

Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys 20 25 30

Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile 50 60

Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp 65 70 75 80

Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr 85 90 95

Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
100 105 110

Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg 115 120 125

Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr 130 135 140

Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile 145 150 155 160

Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
165 170 175

Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp 180 185 190 Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met 195 200 205

Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg 210 215 220

<210> 5

<211> 323

<212> PRT

<213> Homo sapiens

<400> 5

Met Gly Leu Ser Asn Ile Leu Phe Val Met Ala Phe Leu Leu Ser Gly
1 5 10 15

Ala Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu 20 25 30

Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val 35 40 45

Val Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu 50 55 60

Gly Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr 65 70 75 80

Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile 85 90 95

Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr
100 105 110

Gly Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala 115 120 125

Asn Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn 130 135 140

Val Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro 145 150 155 160

Lys Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr
165 170 175

Asp Gly Ile Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp 180 185 190

Val Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met 195 200 205

Thr Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg Leu Leu Ser Ser

Gln Arg Val Phe Lys Ser Ser Lys Thr Ser Ser Cys Asp Lys Ser Asp 310

Thr Cys Phe

<210> 6

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 6

Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu 10

220

315

Asn Ala Phe Thr Val Thr Val Pro Asp Lys Leu Tyr Val Val Glu Tyr 20

Gly Ser Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu 35 40

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile

Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr

Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val 115

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val 135 140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr 150 155 Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser 170 Gly Lys Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn 185 Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr 200 Cys Thr Phe Arq Arq Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu 210 215 Val Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His 230 235 Leu Val Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr 245 250 Phe Ile Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Lys Cys 260 Gly Ile Gln Asp Thr Asn Ser Lys Lys Gln Ser Asp Thr His Leu Glu 280 Glu Thr 290 <210> 7 <211> 302 <212> PRT <213> Homo sapiens <400> 7 Met Arg Leu Gly Ser Pro Gly Leu Leu Phe Leu Leu Phe Ser Ser Leu Arg Ala Asp Thr Gln Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp 20 25 Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr 55 Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His 100 105

```
Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Val
       115
Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser
                                            140
                        135
Ala Pro His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser
                                        155
                    150
Ile Asn Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp
                                    170
Asn Ser Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn
Met Arg Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr
                            200
Pro Ser Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln
    210
Asn Leu Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp
                                        235
Lys Ile Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr
                                    250
Trp Ser Ile Leu Ala Val Leu Cys Leu Leu Val Val Ala Val Ala
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Ile Gly Trp Val Cys Arg Asp Arg Cys Leu Gln His Ser Tyr Ala Gly
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Ala Trp Ala Val Ser Pro Glu Thr Glu Leu Thr Gly His Val
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                        295
<210> 8
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<212> PRT
<213> Homo sapiens
<220>
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<222> (233)
<223> "Xaa" can be any naturally-occurring amino acid
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Met Leu Arg Arg Gly Ser Pro Gly Met Gly Val His Val Gly Ala
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Ala Leu Gly Ala Leu Trp Phe Cys Leu Thr Gly Ala Leu Glu Val Gln

Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu

Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp 120 Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr 150 Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro Glu Ala Glu Val 170 Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr 180 185 Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Val Leu 200 Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn 215 Pro Val Leu Gln Gln Asp Ala His Xaa Ser Val Thr Ile Thr Gly Gln 225 230 Pro Met Thr Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser 250 Val Cys Leu Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg 260 Lys Ile Lys Gln Ser Cys Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln 275 Asp Gly Glu Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His 295 Ser Asp Ser Lys Glu Asp Asp Gly Gln Glu Ile Ala 310

<210> 9 <211> 276

<212> PRT

<213> Homo sapiens

Gln Lys Glu Lys 275

<400> 9 Met Glu Ser Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu 10 Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala Gln Phe Ile Val 25 Val Gly Pro Thr Asp Pro Ile Leu Ala Thr Val Gly Glu Asn Thr Thr Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu Asp Met Glu Val Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe Val Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr Arg Gly Arg Thr 85 90 Thr Phe Val Ser Lys Asp Ile Ser Arg Gly Ser Val Ala Leu Val Ile 105 His Asn Ile Thr Ala Gln Glu Asn Gly Thr Tyr Arg Cys Tyr Phe Gln 120 115 Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu His Leu Val Val Ala Gly Leu Gly Ser Lys Pro Leu Ile Ser Met Arg Gly His Glu Asp Gly Gly Ile Arg Leu Glu Cys Ile Ser Arg Gly Trp Tyr Pro Lys Pro Leu Thr 165 170 Val Trp Arg Asp Pro Tyr Gly Gly Val Ala Pro Ala Leu Lys Glu Val 185 Ser Met Pro Asp Ala Asp Gly Leu Phe Met Val Thr Thr Ala Val Ile 195 200 Ile Arg Asp Lys Ser Val Arg Asn Met Ser Cys Ser Ile Asn Asn Thr Leu Leu Gly Gln Lys Lys Glu Ser Val Ile Phe Ile Pro Glu Ser Phe 235 Met Pro Ser Val Ser Pro Cys Ala Val Ala Leu Pro Ile Ile Val Val 245 250 Ile Leu Met Ile Pro Ile Ala Val Cys Ile Tyr Trp Ile Asn Lys Leu 265

<210> 10

<211> 523

<212> PRT

<213> Homo sapiens

<400> 10

Met Glu Pro Ala Ala Ala Leu His Phe Ser Leu Pro Ala Ser Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala 20 25 30

Gln Phe Thr Val Val Gly Pro Ala Asn Pro Ile Leu Ala Met Val Gly 35 40 45

Glu Asn Thr Thr Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu 50 60

Asp Met Glu Val Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe 65 70 75 80

Val Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Glu Het Glu Glu Tyr 85 90 95

Arg Gly Arg Ile Thr Phe Val Ser Lys Asp Ile Asn Arg Gly Ser Val 100 105 110

Ala Leu Val Ile His Asn Val Thr Ala Gln Glu Asn Gly Ile Tyr Arg 115 120 125

Cys Tyr Phe Gln Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu Arg Leu 130 135 140

Val Val Ala Gly Leu Gly Ser Lys Pro Leu Ile Glu Ile Lys Ala Gln 145 150 155 160

Glu Asp Gly Ser Ile Trp Leu Glu Cys Ile Ser Gly Gly Trp Tyr Pro 165 170 175

Glu Pro Leu Thr Val Trp Arg Asp Pro Tyr Gly Glu Val Val Pro Ala 180 185 190

Leu Lys Glu Val Ser Ile Ala Asp Ala Asp Gly Leu Phe Met Val Thr 195 200 205

Thr Ala Val Ile Ile Arg Asp Lys Tyr Val Arg Asn Val Ser Cys Ser 210 215 220

Val Asn Asn Thr Leu Leu Gly Gln Glu Lys Glu Thr Val Ile Phe Ile 225 230 235 240

Pro Glu Ser Phe Met Pro Ser Ala Ser Pro Trp Met Val Ala Leu Ala 245 250 255

Val Ile Leu Thr Ala Ser Pro Trp Met Val Ser Met Thr Val Ile Leu 260 265 270

Ala Val Phe Ile Ile Phe Met Ala Val Ser Ile Cys Cys Ile Lys Lys 275 280 285

Leu Gln Arg Glu Lys Lys Ile Leu Ser Gly Glu Lys Lys Val Glu Gln 290 295 300

Glu Glu Lys Glu Ile Ala Gln Gln Leu Gln Glu Glu Leu Arg Trp Arg 305 310 315 320

Arg Thr Phe Leu His Ala Ala Asp Val Val Leu Asp Pro Asp Thr Ala 325 330 335

His Pro Glu Leu Phe Leu Ser Glu Asp Arg Arg Ser Val Arg Arg Gly 340 345 350

Pro Tyr Arg Gln Arg Val Pro Asp Asn Pro Glu Arg Phe Asp Ser Gln 355 360 365

Pro Cys Val Leu Gly Trp Glu Ser Phe Ala Ser Gly Lys His Tyr Trp 370 375 380

Glu Val Glu Val Glu Asn Val Met Val Trp Thr Val Gly Val Cys Arg 385 390 395 400

His Ser Val Glu Arg Lys Gly Glu Val Leu Leu Ile Pro Gln Asn Gly 405 410 415

Phe Trp Thr Leu Glu Met Phe Gly Asn Gln Tyr Arg Ala Leu Ser Ser 420 425 430

Pro Glu Arg Ile Leu Pro Leu Lys Glu Ser Leu Cys Arg Val Gly Val 435 440 445

Phe Leu Asp Tyr Glu Ala Gly Asp Val Ser Phe Tyr Asn Met Arg Asp 450 455 460

Arg Ser His Ile Tyr Thr Cys Pro Arg Ser Ala Phe Thr Val Pro Val 465 470 475 480

Arg Pro Phe Phe Arg Leu Gly Ser Asp Asp Ser Pro Ile Phe Ile Cys 485 490 495

Pro Ala Leu Thr Gly Ala Ser Gly Val Met Val Pro Glu Glu Gly Leu 500 505 510

Lys Leu His Arg Val Gly Thr His Gln Ser Leu 515 520

<210> 11

<211> 263

<212> PRT

<213> Homo sapiens

<400> 11

Phe His Val Ser Leu Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala
1 5 10 15

Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly
20 25 30

Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu 35 40 45

Thr Met Glu Leu Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn 50 55 60

Val Tyr Ala Asp Gly Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr 65 70 75 80

Arg Gly Arg Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala 85 90 95

Ala Leu Arg Ile His Asn Val Thr Ala Ser Asp Ser Gly Lys Tyr Leu 100 105 110

Cys Tyr Phe Gln Asp Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu 115 120 125

Lys Val Ala Ala Leu Gly Ser Asn Leu His Val Glu Val Lys Gly Tyr 130 135 140

Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro 145 150 155 160

Gln Pro Gln Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala 165 170 175

Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu Tyr Glu Val Ala 180 185 190

Ala Ser Val Ile Met Arg Gly Gly Ser Gly Glu Gly Val Ser Cys Ile 195 200 205

Ile Arg Asn Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser Ile Ser Ile 210 215 220

Ala Asp Pro Phe Phe Arg Ser Ala Gln Pro Trp Ile Ala Ala Leu Ala 225 230 235 240

Gly Thr Leu Pro Ile Leu Leu Leu Leu Leu Ala Gly Ala Ser Tyr Phe 245 250 255

Leu Trp Arg Gln Gln Lys Glu 260

<210> 12

<211> 584

<212> PRT

<213> Homo sapiens

<400> 12

Met Lys Met Ala Ser Ser Leu Ala Phe Leu Leu Asn Phe His Val

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Ser	Leu	Phe	Leu 20	Val	Gln	Leu	Leu	Thr 25	Pro	Cys	Ser	Ala	Gln 30	Phe	Ser
Val	Leu	Gly 35	Pro	Ser	Gly	Pro	Ile 40	Leu	Ala	Met	Val	Gly 45	Glu	Asp	Ala
Asp	Leu 50	Pro	Cys	His	Leu	Phe 55	Pro	Thr	Met	Ser	Ala 60	Glu	Thr	Met	Glu
Leu 65	Arg	Trp	Val	Ser	Ser 70	Ser	Leu	Arg	Gln	Val 75	Val	Asn	Val	Tyr	Ala 80
Asp	Gly	Lys	Glu	Val 85	Glu	Asp	Arg	Gln	Ser 90	Ala	Pro	Tyr	Arg	Gly 95	Arg
Thr	Ser	Ile	Leu 100	Arg	Asp	Gly	Ile	Thr 105	Ala	Gly	Lys	Ala	Ala 110	Leu	Arg
Ile	His	Asn 115	Val	Thr	Ala	Ser	Asp 120	Ser	Gly	Lys	Tyr	Leu 125	Cys	Tyr	Phe
Gln	Asp 130	Gly	Asp	Phe	Tyr	Glu 135	Lys	Ala	Leu	Val	Glu 140	Leu	Lys	Val	Ala
Ala 145	Leu	Gly	Ser	Asp	Leu 150	His	Ile	Glu	Val	Lys 155	Gly	Tyr	Glu	Asp	Gly 160
Gly	Ile	His	Leu	Glu 165	Cys	Arg	Ser	Thr	Gly 170	Trp	Tyr	Pro	Gln	Pro 175	Gln
Ile	Lys	Trp	Ser 180	Asp	Thr	Lys	Gly	Glu 185	Asn	Ile	Pro	Ala	Val 190	Glu	Ala
Pro	Val	Val 195	Ala	Asp	Gly	Val	Gly 200	Leu	Tyr	Ala	Val	Ala 205	Ala	Ser	Val
Ile	Met 210	Arg	Gly	Ser		Gly 215		Gly	Val	Ser	Cys 220		Ile	Arg	Asn
Ser 225	Leu	Leu	Gly	Leu	Glu 230	Lys	Thr	Ala	Ser	Ile 235	Ser	Ile	Ala	Asp	Pro 240
Phe	Phe	Arg	Ser	Ala 245	Gln	Pro	Trp	Ile	Ala 250	Ala	Leu	Ala	Gly	Thr 255	Leu
Pro	Ile	Ser	Leu 260	Leu	Leu	Leu	Ala	Gly 265	Ala	Ser	Tyr	Phe	Leu 270	Trp	Arg
Gln	Gln	Lys 275	Glu	Lys	Ile	Ala	Leu 280	Ser	Arg	Glu	Thr	Glu 285	Arg	Glu	Arg
Glu	Met 290	Lys	Glu	Met	Gly	Tyr 295	Ala	Ala	Thr	Glu	Gln 300	Glu	Ile	Ser	Leu
Arg	Glu	Lys	Leu	Gln	Glu	Glu	Leu	Lys	Trp	Arg	Lys	Ile	Gln	Tyr	Met

50 H4 54 12 7
100 100 100 100 100 100 100 100 100 100
Maria Grant
455
Maria Grant
Had deal from Had then Mark then
ifith chule pouce home Hail Hail Bern, Born, All att ortal model
derft baret flower flest. Haaff Afferen blane Affer Affer Afferen Baret Affer Affer

H=k

THE STREET

305 310 315 320

Ala Arg Gly Glu Lys Ser Leu Ala Tyr His Glu Trp Lys Met Ala Leu 325 330 335

Phe Lys Pro Ala Asp Val Ile Leu Asp Pro Asp Thr Ala Asn Ala Ile 340 345 350

Leu Leu Val Ser Glu Asp Gln Arg Ser Val Gln Arg Ala Glu Glu Pro 355 360 365

Arg Asp Leu Pro Asp Asn Pro Glu Arg Phe Glu Trp Arg Tyr Cys Val 370 380

Leu Gly Cys Glu Asn Phe Thr Ser Gly Arg His Tyr Trp Glu Val Glu 385 390 395 400

Val Gly Asp Arg Lys Glu Trp His Ile Gly Val Cys Ser Lys Asn Val 405 410 415

Glu Arg Lys Lys Gly Trp Val Lys Met Thr Pro Glu Asn Gly Tyr Trp 420 425 430

Thr Met Gly Leu Thr Asp Gly Asn Lys Tyr Arg Ala Leu Thr Glu Pro 435 440 445

Arg Thr Asn Leu Lys Leu Pro Glu Pro Pro Arg Lys Val Gly Ile Phe 450 455 460

Leu Asp Tyr Glu Thr Gly Glu Ile Ser Phe Tyr Asn Ala Thr Asp Gly 465 470 475 480

Ser His Ile Tyr Thr Phe Pro His Ala Ser Phe Ser Glu Pro Leu Tyr 485 490 495

Pro Val Phe Arg Ile Leu Thr Leu Glu Pro Thr Ala Leu Thr Ile Cys 500 510

Pro Ile Pro Lys Glu Val Glu Ser Ser Pro Asp Pro Asp Leu Val Pro 515 520 525

Asp His Ser Leu Glu Thr Pro Leu Thr Pro Gly Leu Ala Asn Glu Ser 530 540

Gly Glu Pro Gln Ala Glu Val Thr Ser Leu Leu Leu Pro Ala His Pro 545 550 555 560

Gly Ala Glu Val Ser Pro Ser Ala Thr Thr Asn Gln Asn His Lys Leu
565 570 575

Gln Ala Arg Thr Glu Ala Leu Tyr 580

<210> 13

<211> 526

<212> PRT

<213> Homo sapiens

275

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285

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Val Thr Leu Asp Pro Asp Thr Ala His Pro His Leu Phe Leu Tyr Glu
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Lys Thr Glu Arg Phe Asp Ser Trp Pro Cys Val Leu Gly Arg Glu Thr
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Phe Thr Ser Gly Arg His Tyr Trp Glu Val Glu Val Gly Asp Arg Thr
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Asp Pro Met Thr Pro Glu Asn Gly Phe Trp Ala Val Glu Leu Tyr Gly
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